



### General

#### Title

Oral cavity squamous cell carcinoma: percentage of patients with American Joint Committee on Cancer (AJCC) Stage III or IV oral cavity squamous cell carcinoma who are referred for adjuvant radiation following curative intent surgery.

### Source(s)

Nussenbaum B. National Quality Measures Clearinghouse measure submission form: percentage of patients with American Joint Committee on Cancer (AJCC) Stage III or IV oral cavity squamous cell carcinoma who are referred for adjuvant radiation following curative intent surgery. St. Louis (MO): Washington University School of Medicine; 2016 Feb 11. 11 p. [7 references]

### Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

# **Brief Abstract**

### Description

This measure is used to assess the percentage of patients with American Joint Committee on Cancer (AJCC) Stage III or IV oral cavity squamous cell carcinoma who are referred for adjuvant radiation following curative intent surgery.

#### Rationale

Head and neck cancer is the sixth most common cancer worldwide and is responsible for 5% to 10% of all new cancer cases annually in the United States. It is a disease associated with significant mortality and results in more than 350,000 deaths annually.

There is a growing national imperative to improve the quality of cancer care. Recommendation number

three from the Institute of Medicine, in its 10 Recommendations for Improving the Quality of Cancer Care in America, is to measure and monitor the quality of care using a core set of quality measures. A call for the development of quality measures for patients with oral cavity squamous cell carcinoma (OCSCC) was approved by the executive council of the American Head and Neck Society (AHNS) in 2007. Nationally endorsed and validated quality measures for patients with OCSCC do not yet exist. To improve the quality of oral cavity cancer care, reliable and valid measures of health care quality must be developed.

These indicators can be used to assess the quality of care delivered to patients with oral cavity squamous cell carcinoma. By providing for a consistent approach to measuring quality (same indicators, same definitions, same data elements) these measures would allow institutions to have reliable performance data to benchmark current performance levels, identify areas for improvement, evaluate the effects of quality improvement projects, and provide comparisons across centers.

The indicator is intended to monitor the percentage of patients with American Joint Committee on Cancer (AJCC) Stage III or IV oral cavity squamous cell carcinoma who are referred for adjuvant radiation following curative intent surgery.

#### Evidence for Rationale

Chen AY. The development of quality of care measures for oral cavity cancer. Arch Otolaryngol Head Neck Surg. 2008 Jun;134(6):672. PubMed

Gourin CG, Couch ME. Defining quality in the era of health care reform. JAMA Otolaryngol Head Neck Surg. 2014 Nov;140(11):997-8. PubMed

Hessel AC, Moreno MA, Hanna EY, Roberts DB, Lewin JS, El-Naggar AK, Rosenthal DI, Weber RS. Compliance with quality assurance measures in patients treated for early oral tongue cancer. Cancer. 2010 Jul 15;116(14):3408-16. PubMed

Krouse JH. Variation, cost, and quality of care. Head Neck. 2015 Jun;38(7):1002-7. PubMed

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Parkin DM, Bray F, Ferlay J, Pisani P. Global cancer statistics, 2002. CA Cancer J Clin. 2005 Mar-Apr;55(2):74-108. PubMed

Weber RS, Lewis CM, Eastman SD, Hanna EY, Akiwumi O, Hessel AC, Lai SY, Kian L, Kupferman ME, Roberts DB. Quality and performance indicators in an academic department of head and neck surgery. Arch Otolaryngol Head Neck Surg. 2010 Dec;136(12):1212-8. PubMed

### Primary Health Components

Stage III or IV oral cavity squamous cell carcinoma; adjuvant radiation; postoperative radiation

### **Denominator Description**

Number of patients with American Joint Committee on Cancer (AJCC) Stage III or IV oral cavity squamous cell carcinoma who undergo curative intent surgery (see the related "Denominator Inclusions/Exclusions" field)

### **Numerator Description**

Number of patients with American Joint Committee on Cancer (AJCC) Stage III or IV oral cavity squamous cell carcinoma who undergo curative intent surgery and are referred for adjuvant radiation (see the related "Numerator Inclusions/Exclusions" field)

# Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

### Additional Information Supporting Need for the Measure

Unspecified

### **Extent of Measure Testing**

Quality indicators were identified from available literature, consensus guidelines, and head and neck cancer experts. Adherence with individual quality measures and a composite measure of all indicators was assessed via retrospective chart review on 192 patients with previously untreated oral cavity squamous cell carcinoma who underwent surgery at a tertiary care academic medical center between 2003 and 2010. Of the 19 proposed measures, 4 maintained a robust correlation between performance of the measure and improved survival on univariable and multivariable analysis.

Refer to Association of Compliance with Process-related Quality Metrics and Improved Survival in Oral Cavity Squamous Cell Carcinoma for additional measure testing information.

# Evidence for Extent of Measure Testing

Graboyes EM, Gross J, Kallogjeri D, Piccirillo JF, Al-Gilani M, Stadler ME, Nussenbaum B. Association of compliance with process-related quality metrics and improved survival in oral cavity squamous cell carcinoma. JAMA Otolaryngol Head Neck Surg. 2016 May 1;142(5):430-7. [34 references] PubMed

Nussenbaum B. National Quality Measures Clearinghouse measure submission form: percentage of patients with American Joint Committee on Cancer (AJCC) Stage III or IV oral cavity squamous cell carcinoma who are referred for adjuvant radiation following curative intent surgery. St. Louis (MO): Washington University School of Medicine; 2016 Feb 11. 11 p. [7 references]

## State of Use of the Measure

#### State of Use

Current routine use

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not defined yet

# Application of the Measure in its Current Use

### Measurement Setting

Hospital Inpatient

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

### Statement of Acceptable Minimum Sample Size

Unspecified

### Target Population Age

Age greater than or equal to 18 years

# **Target Population Gender**

Either male or female

# National Strategy for Quality Improvement in Health Care

# National Quality Strategy Aim

Better Care

# National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

#### TOM COLE MEEU

Getting Better

Living with Illness

#### **IOM Domain**

Effectiveness

# Data Collection for the Measure

### Case Finding Period

Unspecified

### **Denominator Sampling Frame**

Patients associated with provider

### Denominator (Index) Event or Characteristic

Clinical Condition

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

#### **Denominator Time Window**

not defined yet

### Denominator Inclusions/Exclusions

#### Inclusions

All patients greater than or equal to 18 years of age with pathologic American Joint Committee on Cancer (AJCC) stage III or IV disease undergoing definitive surgical management for oral cavity squamous cell carcinoma

#### Exclusions

Mortality during the index hospitalization

Previous treatment of oral cavity cancer

Prior history of head and neck cancer

Histology other than squamous cell carcinoma (or its histologic subtypes)

Management strategy other than up-front definitive intent surgery +/- postoperative adjuvant therapy

#### Exceptions

Documentation of medical reason(s) for not referring for adjuvant radiation (e.g., medical comorbidities)

Documentation of patient reason(s) for not referring or prescribing adjuvant radiation (e.g., patient

refusal)

Documentation of system reason(s) for not referring for adjuvant radiation (e.g., patient is currently enrolled in a clinical trial that precludes prescription of radiation)

### Exclusions/Exceptions

not defined yet

### Numerator Inclusions/Exclusions

Inclusions

Number of patients with American Joint Committee on Cancer (AJCC) Stage III or IV oral cavity squamous cell carcinoma who undergo curative intent surgery and are referred for adjuvant radiation

Note: If a patient is referred for adjuvant radiation but chooses not to have the consultation or for whatever reason does receive radiation therapy, the metric is scored as achieved.

Exclusions

Unspecified

### Numerator Search Strategy

Fixed time period or point in time

#### **Data Source**

Administrative clinical data

Registry data

# Type of Health State

Does not apply to this measure

# Instruments Used and/or Associated with the Measure

Unspecified

# Computation of the Measure

# Measure Specifies Disaggregation

Does not apply to this measure

### Scoring

Rate/Proportion

# Interpretation of Score

### Allowance for Patient or Population Factors

not defined yet

### Standard of Comparison

not defined yet

# **Identifying Information**

### **Original Title**

Percentage of patients with American Joint Committee on Cancer (AJCC) Stage III or IV oral cavity squamous cell carcinoma who are referred for adjuvant radiation following curative intent surgery.

#### Measure Collection Name

Oral Cavity Squamous Cell Carcinoma

#### Submitter

Washington University School of Medicine - Academic Institution

### Developer

Washington University School of Medicine - Academic Institution

# Funding Source(s)

Unspecified

### Composition of the Group that Developed the Measure

- Brian Nussenbaum, MD
- Evan M. Graboyes, MD
- Dorina Kallogjeri, MD
- Jay F. Piccirillo, MD
- Michael E. Stadler, MD
- Jennifer Gross, MD
- Maha al-Gilani, MD

# Financial Disclosures/Other Potential Conflicts of Interest

No relevant disclosures of conflicts of interest

### Adaptation

This measure was not adapted from another source.

### Date of Most Current Version in NQMC

2016 Feb

#### Measure Maintenance

Unspecified

### Date of Next Anticipated Revision

Unspecified

#### Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in January 2017.

### Measure Availability

Source not available electronically.

For more information, contact Brian Nussenbaum, MD, at the Washington University School of Medicine, Department of Otolaryngology-Head and Neck Surgery, 600 S. Euclid Avenue, Campus Box 8115, St. Louis, MO 63110; Phone: 314-362-6599; Fax: 314-362-7522; Email: nussenbaumb@ent.wustl.edu.

### **NQMC Status**

This NQMC summary was completed by ECRI Institute on September 12, 2016. The information was verified by the measure developer on September 13, 2016.

The information was reaffirmed by the measure developer on January 17, 2017.

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No copyright restrictions apply.

# Production

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